



Section B:1

Waste Management

PROJECT MANAGERS

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SUMMARY

Waste Management consists of the Solid Waste Storage and Disposal, Project Baseline Summary (PBS) WM03, Work Breakdown Structure (WBS) 1.2.1; Solid Waste Treatment, PBS WM04, WBS 1.2.2; Liquid Effluents - 200 Area, PBS WM05, WBS 1.2.3.1; and the Waste Encapsulation and Storage Facility, PBS TP02, WBS 1.4.2.

PBS WM05 is divided between WBS 1.2.3.1, Liquid Effluents (200 LEF) and WBS 1.2.3.2, 310 TEDF/340 Facility (300 LEF). The 310 TEDF/340 Facility work scope is now included in the River Corridor Project, whereas the Liquid Effluents (200 LEF) work scope has remained in Waste Management. For the purpose of performance analysis, PBS WM05 is reported in its entirety in the Waste Management Project (WMP), which has the majority of the work scope and funding.

NOTE: Unless otherwise noted, the Safety, Conduct of Operations, Milestone Achievement, and Cost/Schedule data contained herein is as of July 31, 2000. Other data is updated as noted.

Fiscal-year-to-date milestone performance (EA, DOE-HQ and RL) shows that two milestones (100 percent) were completed ahead of schedule. Overall Project performance continues to be excellent. Cost and schedule goals are on track to be met.

ACCOMPLISHMENTS

- A ceremony celebrating the first TRU waste shipment to the Waste Isolation Pilot Plant (WIPP) was held on August 9, 2000. Approximately 150 people attended. The second shipment remains scheduled for the week of August 24, 2000. The Carlsbad Area Office (CAO) has indicated they may request a delay of the shipment to the first week in September to correlate to a WIPP visit by Secretary Richardson. The first revalidated Non-Destructive Examination (NDE) data package of containers processed prior to the WIPP Permit was provided to CAO for review. CAO has indicated that no deficiencies were identified in the package and has forwarded the package to New Mexico Environment Department.
- Retrieval and designation of 425 suspect TRU drums was achieved with the completion of field assaying on August 3, 2000. The validation of the assay data is in progress (due the week of September 9, 2000) that will complete the Performance Initiative (PI) expectation. Confirmation was received on \$550K of EM-50 monies to be used to perform in-trench assay of suspect TRU waste next year. A technical task plan will be developed to manage these funds.
- Shipments for treatment of MLLW debris to Allied Technology Group, Inc. (ATG) were completed on August 10, 2000. A total of 1,186 cubic meters (116 cubic meters in the past month) of waste was shipped to ATG representing 102% of the FY2000 shipment objective. ATG has treated 750 cubic meters of this waste representing 65% of the FY 2000 treatment objective. Hanford has accepted 141 treated waste packages back from ATG totaling 371 cubic meters that represents 57% of the FY 2000 disposal objective. In addition to the ATG

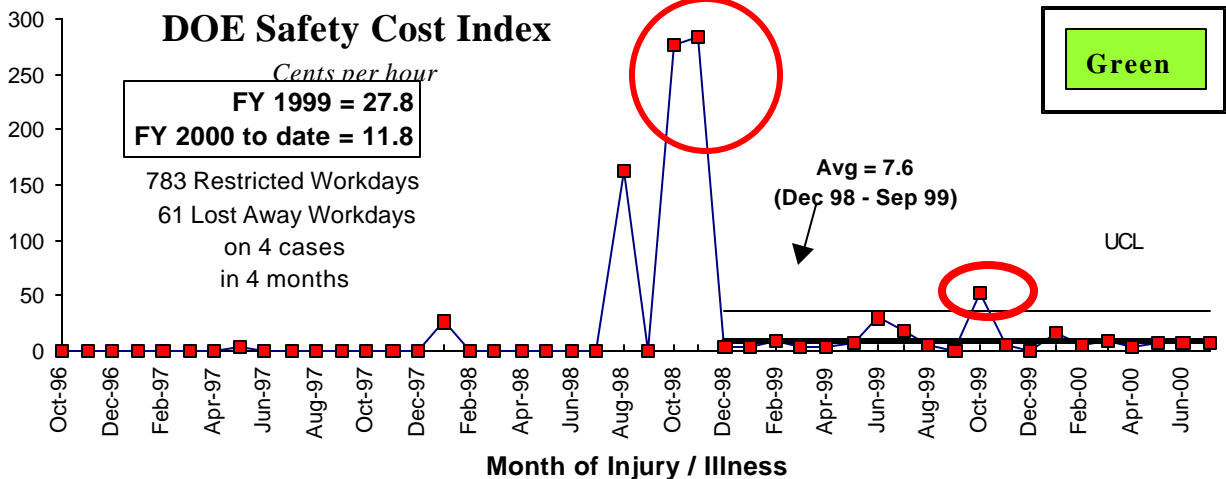
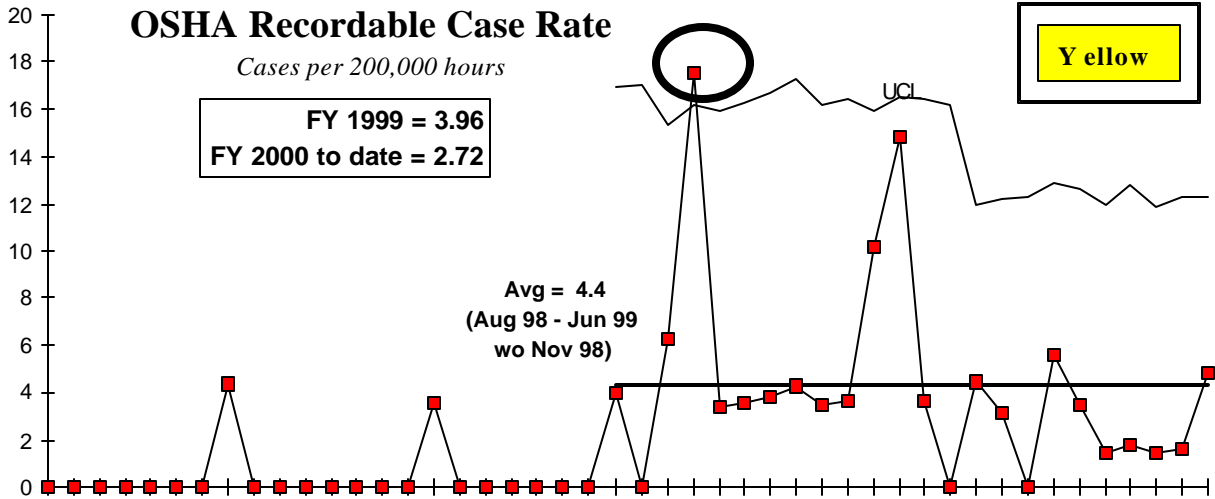
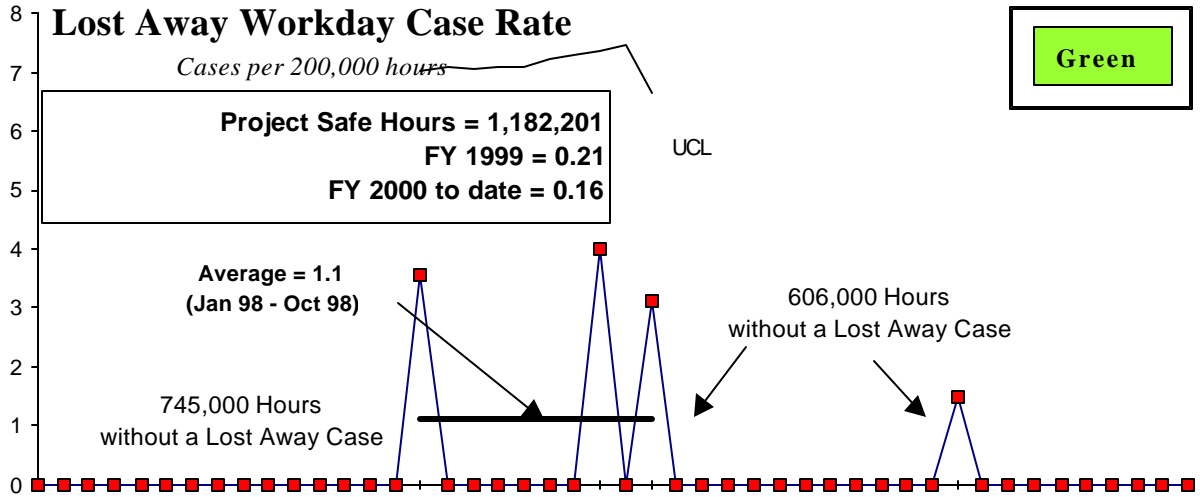
activity, 42 cubic meters of 200 Area Liquid Effluent Facility (LEF) Land Disposal Restriction (LDR) compliant powders were shipped from the Central Waste Complex (CWC) to the Mixed Waste Trench for void-filling followed by disposal. To date, 25 cubic meters of this waste have been void-filled and disposed. All these activities together represent an effective CWC storage volume reduction of 1,910 cubic meters. (All data as of August 14, 2000). Waste Receiving and Processing (WRAP) production through August 11, 2000:

- Nondestructive examination of 133 drums current month (824 FYTD)
 - Radiography on 1 box current month (28 FYTD)
 - Nondestructive assays of 192 drums current month (883 FYTD)
-
- Processed 0.6 million gallons this reporting period (16 million gallons FYTD) of wastewater through the 200 Effluent Treatment Facility supporting River Protection Project (RPP), Environmental Restoration Contract (ERC) 200-UP-1 Groundwater, N-Basin Water, Mixed Waste Trench Leachate, and Environmental Restoration Disposal Facility (ERDF) Leachate.
 - DOE-HQ conducted a workshop to finalize a strategy for operation of the three DOE incinerators (Consolidated Incinerator Facility [CIF] at Savannah River Site, Toxic Substance Control Act Incinerator [TSCAI] at Oak Ridge, and Waste Experimental Reduction Facility [WERF] at Idaho). Incinerator operators and generators of waste requiring incineration met in Denver the week of August 14-18, 2000, to decide on the best course of action for continued operation of the DOE incinerators. The Savannah River incinerator began shut down last week. The incinerator at Idaho recently received a notice from the state of Idaho that its permit would not be renewed, and shutdown of that facility is imminent. Hanford is further ahead of most of the other sites in planning and implementation for mixed waste that requires thermal treatment.
 - The report titled “*221-U Conceptual Structural Study (CSS) for the Canyon Disposition Initiative (CDI) HNF-6325, Rev. 0*” was formally issued and released for public distribution. The report concludes that the 221-U Canyon Building can conceptually withstand the structural loads associated with the entombment waste disposal alternatives postulated by the CDI.

SAFETY

During the month of July, WMP experienced an increase in OSHA recordable injuries (3 for the month). The events were evaluated by the facility management and actions taken to correct the root and direct causes. To help galvanize attention on the prevention of employee injuries, a special focus meeting was held with all WMP Employee Zero Accident Council (EZAC) chairpersons, the facility managers, and facility safety professionals. Information on each of the injuries occurring on the project (year-to-date) was provided and the projects were requested to review and analyze the information, and develop corrective actions as appropriate to address issues identified.

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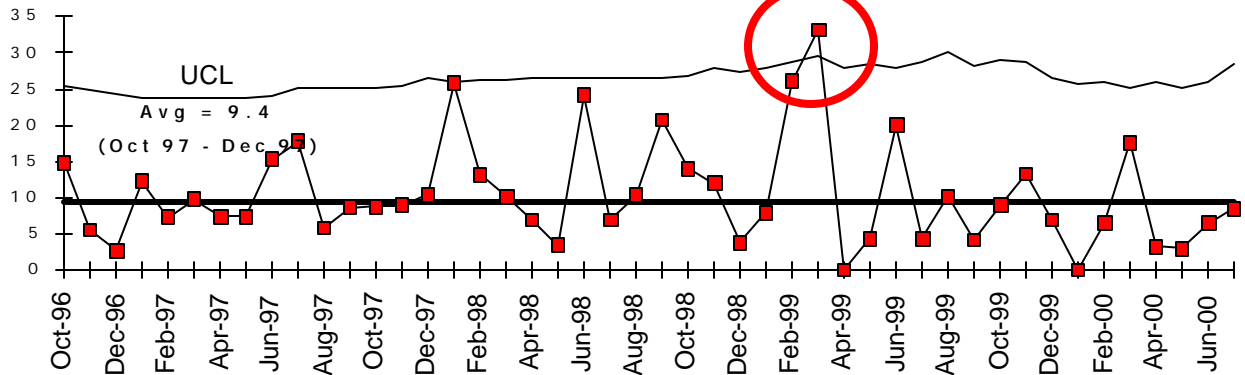
CONDUCT OF OPERATIONS / ISMS STATUS

Green

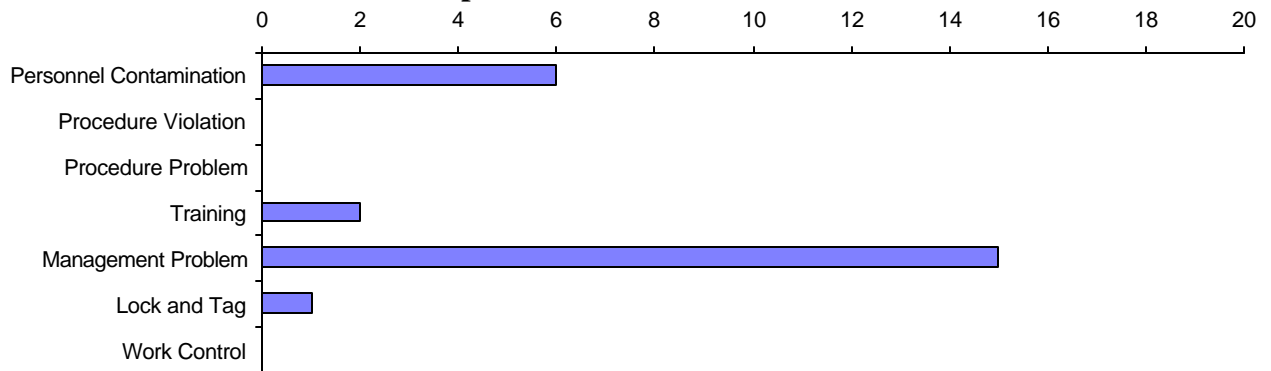
Conduct of Operations Index

Events per 200,000 Operations Hours

FY 98 = 12.4
FY 99 = 11.4
FY 00 to date = 7.2



Number of Reports Past 12 Months



ISMS STATUS

Green

Completed Activity: Supported successful completion of the Phase II verification of ISMS.

Planned Action:

- Define required corrective actions identified in the 43 concerns grouped into ten Opportunities for Improvement by the DOE Verification Team and track to closure.
- Submit Corrective Action Plans for the ten Opportunities for Improvement, which are due 45 days from the date of signature (August 3, 2000).
- Establish Deficiency Evaluation Group (DEG) teams and begin the DEG process.
- The WMP / AS system descriptions are being re-written, in response to a Phase I finding. The final product is due September 30, 2000.
- Prepare the Sustain and Maintain Plan for ISMS.

BREAKTHROUGHS / OPPORTUNITIES FOR IMPROVEMENT

Breakthroughs

Green

Remote-Handled TRU WIPP Waste Acceptance: A meeting was attended in Oak Ridge to discuss WIPP Waste Acceptance Criteria (WAC) for remote handled (RH) TRU waste. Discussions centered on sticking only to the WIPP RCRA Part B and Land Withdrawal Act requirements. If successful, waste characterization costs at Hanford will be minimized, as well as employee exposures (per ALARA).

Opportunities for Improvement

Green

Waste and Materials Disposition [except Plutonium (Pu)] Team: RL is assessing the framework under which it can maximize its cleanup while working to incorporate a “realistic” funding profile over the next ten to fifteen years. Consistent with the RL outcomes, the priority is the achievement of the River Corridor Outcome by 2010, or shortly thereafter. Guidance for re-sequencing of the current baseline activities in the 200 Areas will result. The Waste Management Project is leading the Waste and Materials Disposition (except Pu) Team to identify opportunities for improvement. A combination of delayed TRU waste retrieval and M-91 facility delay were the only options evaluated. A consolidated report of the five separate teams that prepared studies is expected to be available from the RL-lead task force.

UPCOMING ACTIVITIES

WIPP Certification and Waste Shipments — Ramp-up shipment of Hanford TRU waste to the Waste Isolation Pilot Plant (WIPP). Establish recovery path of the Non-Destructive Examination/Visual Examination (NDE/VE) data generated prior to the WIPP Permit to support the third shipment to WIPP, which is scheduled for September 20.

Remote-Handled TRU Project Management Plan (PMP) — Support RL during the 45- day regulator comment period (which ended August 14), and assist RL in dispositioning comments.

MLLW Treatment — Dispose of the Land Disposal Restriction compliant waste by September 2000.

Accelerate Readiness to Receive Spent Nuclear Fuel K Basin Sludge

- Clear three sections of the T Plant Canyon deck by September 2000 and complete entire deck clearing by FY 2001.
- Complete Project Execution Plan and Conceptual Design Documents for removal of Shippingport (PA) Fuel from T Plant by September 2000.
- Develop design requirements for acceptance of K Basin sludge at T Plant by September 2000.
- Complete safety basis documentation and long lead procurements in FY 2001. Install handling, drying and loading equipment in FY 2001.
- Complete procedures, training, and Operations Readiness Review (ORR); complete

Shippingport fuel movement out of T Plant in FY 2002.

Land Disposal Restriction Report — Support RL during the 45-day regulator comment period.

616 Facility Closure — Work to close 616 facility to start in August.

COST PERFORMANCE (\$M):

	BCWP	ACWP	VARIANCE
Waste Management	\$87.2	\$84.6	\$2.6

The \$2.6 million (3 percent) favorable cost variance is within the established threshold. Further information at the PBS level can be found in the following Cost Variance Analysis details.

SCHEDULE PERFORMANCE (\$M):

	BCWP	BCWS	VARIANCE
Waste Management	\$87.2	\$89.1	- \$1.9

The \$1.9 million (2 percent) unfavorable schedule variance is within established threshold. Further information at the PBS level can be found in the following Schedule Variance Analysis details.

FY 2000 COST/SCHEDULE PERFORMANCE – ALL FUND TYPES **CUMULATIVE TO DATE STATUS – (\$000)**

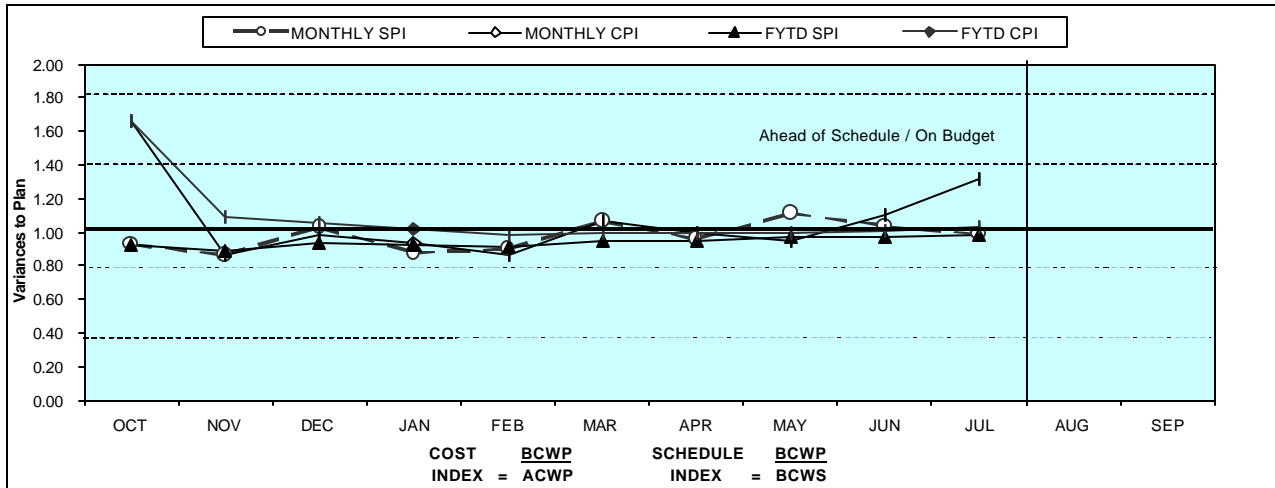
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		FYTD									
By PBS		BCWS	BCWP	ACWP	SV	%	CV	%	PEM	EAC	
PBS WM03 WBS 1.2.1	Solid Waste Storage & Disposal	\$ 28,986	\$ 29,015	\$ 27,287	\$ 29	0%	\$ 1,728	6%	\$ 37,857	\$ 35,502	
PBS WM04 WBS 1.2.2	Solid Waste Treatment	\$ 28,063	\$ 26,832	\$ 27,008	\$ (1,231)	-4%	\$ (176)	-1%	\$ 36,148	\$ 34,370	
PBS WM05* WBS 1.2.3	Liquid Effluents - 200/300 Area	\$ 21,914	\$ 21,353	\$ 20,195	\$ (561)	-3%	\$ 1,158	5%	\$ 27,392	\$ 25,609	
PBS TP02 WBS 1.4.2	WESF	\$ 10,153	\$ 9,984	\$ 10,054	\$ (169)	-2%	\$ (70)	-1%	\$ 12,748	\$ 12,538	
Total		\$ 89,116	\$ 87,183	\$ 84,544	\$ (1,933)	-2%	\$ 2,640	3%	\$ 114,146	\$ 108,019	

PBS WM05 includes the 300 Area Liquid Effluent, which is part of the River Corridor Project.
 RL-Directed costs (steam and laundry) are included in the Project Execution Module (PEM) BCWS.

COST/SCHEDULE PERFORMANCE INDICES (MONTHLY AND FYTD)

Green



FY 2000	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MONTHLY SPI	0.93	0.86	1.03	0.88	0.90	1.07	0.96	1.11	1.04	0.99		
MONTHLY CPI	1.66	0.87	0.98	0.94	0.86	1.07	0.99	0.94	1.10	1.31		
FYTD SPI	0.93	0.89	0.93	0.92	0.91	0.95	0.95	0.97	0.98	0.98		
FYTD CPI	1.66	1.09	1.05	1.02	0.98	1.00	1.00	0.99	1.00	1.03		
MONTHLY BCWS	\$ 6,641	\$ 9,616	\$ 7,269	\$ 8,331	\$ 8,862	\$ 10,686	\$ 8,906	\$ 9,121	\$ 9,646	\$ 10,040	\$ 12,617	\$ 12,412
MONTHLY BCWP	\$ 6,163	\$ 8,277	\$ 7,499	\$ 7,291	\$ 7,973	\$ 11,406	\$ 8,514	\$ 10,136	\$ 10,012	\$ 9,913		
MONTHLY ACWP	\$ 3,703	\$ 9,520	\$ 7,619	\$ 7,789	\$ 9,270	\$ 10,685	\$ 8,562	\$ 10,729	\$ 9,110	\$ 7,557		
FYTD BCWS	\$ 6,641	\$ 16,257	\$ 23,526	\$ 31,857	\$ 40,719	\$ 51,404	\$ 60,310	\$ 69,431	\$ 79,076	\$ 89,117	\$ 101,734	\$ 114,146
FYTD BCWP	\$ 6,163	\$ 14,440	\$ 21,939	\$ 29,230	\$ 37,203	\$ 48,609	\$ 57,123	\$ 67,259	\$ 77,270	\$ 87,183		
FYTD ACWP	\$ 3,703	\$ 13,223	\$ 20,842	\$ 28,631	\$ 37,901	\$ 48,586	\$ 57,148	\$ 67,877	\$ 76,987	\$ 84,544		

COST VARIANCE ANALYSIS: (\$2.6M)

WBS/PBS

Title

1.2.1/WM03

Solid Waste Storage & Disposal

Description/Cause: The favorable cost variance of \$1.7M (6 percent) is within the established threshold.

Impact: No impact.

Corrective Action: No action required.

1.2.2/WM04

Solid Waste Treatment

Description/Cause: The unfavorable cost variance of \$0.2M (1 percent) is within the established threshold.

Impact: No impact.

Corrective Action: No action required.

1.2.3.1/WM05

Liquid Effluents

Description/Cause: The favorable cost variance of \$1.2M (5 percent) is within the established threshold.

Impact: No impact.

Corrective Action: No corrective action required.

1.4.2/TP02

WESF

Description/Cause: The unfavorable cost variance of \$0.01M (1 percent) is within the established threshold.

Impact: No impact.

Corrective Action: No corrective action required.

SCHEDULE VARIANCE ANALYSIS: (-\$1.9M)

WBS/PBS

Title

1.2.1/ WM03

Solid Waste Storage & Disposal

Description /Cause: The unfavorable schedule variance of \$0M (0 percent) is within the established threshold.

Impact: No Impact.

Corrective Action: No corrective action required.

1.2.2/ WM04

Solid Waste Treatment

Description /Cause: The unfavorable schedule variance of \$1.2M (4 percent) is within the established threshold.

Impact: No Impact.

Corrective Action: No corrective action required.

1.2.3.1/ WM05

Liquid Effluents

Description /Cause: The unfavorable schedule variance of \$0.6M (3 percent) is within the established threshold.

Impact: No Impact.

Corrective Action: No corrective action required.

1.4.2/ TP02

WESF

Description /Cause: The unfavorable schedule variance of \$0.2M (2 percent) is within the established threshold.

Impact: No Impact.

Corrective Action: No corrective action required.

FUNDS MANAGEMENT
FUNDS VS SPENDING FORECAST (\$000)
FY TO DATE THROUGH JULY 2000
(FLUOR HANFORD, INC. ONLY)

	Project Completion *			Post 2006 *			Line Items *		
	Expected Funds	FYSF	Variance	Expected Funds	FYSF	Variance	Expected Funds	FYSF	Variance
The Plateau 1.2 Waste Management TP02,WM03-05									
Line Item									
Total Waste Mgt. Operating				\$ 103,800	\$ 99,289	\$ 4,511			
Total Waste Mgt. Line Item				\$ 103,800	\$ 99,289	\$ 4,511			

* Control Point

ISSUES

Technical Issues

WESF is scheduled to receive Cogema's report on the Type W overpack capsule welds in early September.

Impact (s): Preliminary information indicates that Cogema's Level III Non-Destructive Examination (NDE) inspector has identified four of the 23 Type W overpack capsules as having "questionable" weld indications. These indications are related to very small voids/porosity in the weld area. This condition does not pose a problem with regard to the present containment integrity of these capsules.

Corrective Action: The results of Cogema's analysis will be evaluated to determine if any issues exist with respect to long-term storage in the WESF pool cells.

DOE/Regulator/External Issues

The Waste Management Programmatic Environmental Impact Statement (PEIS) was issued on February 25, 2000. These Records of Decision (ROD) for low-level waste (LLW) and mixed low-level waste (MLLW) will affect Hanford's disposal role for the Complex and the ROD outcomes may have a significant impact on disposal volumes and rates at Hanford. DOE-HQ and WDOE negotiations continue; impacts depend upon results of these negotiations.

Hanford's TRU Project continues working with the Carlsbad Area Office (CAO), the Environmental Protection Agency (EPA) and the New Mexico Environment Department (NMED) to determine the appropriate path forward for recovery of the Nondestructive Examination/Value Engineering (NDE/VE) data generated prior to the WIPP Permit. Additional conference calls were held with CAO to determine the appropriate path forward for recovery of the NDE/VE data generated prior to the WIPP Permit. CAO commitments to provide compliance matrices necessary to initiate the Hanford data evaluations were not met. The lack of

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consistency from CAO and failure to provide needed information has delayed initiation of the data recovery. CAO finally concurred with the proposed Hanford path forward for data recovery, and NDE data recovery efforts were initiated immediately. The method requires review of the original videotape and data by a qualified operator, completion of new batch data reports in accordance with current procedures, and validation of the batch data reports in accordance with the current CAO Weekly Report (for the week ending July 14, 2000) procedures. Schedules for bringing all the "old" data forward are being developed based on the accepted method.

Substantial areas of disagreement still exist between DOE-RL and Washington State Department of Ecology (Ecology) on the required scope and content of the Annual Land Disposal Restrictions (LDR) Submittal for Mixed Wastes as delineated in the Final Determination issued by the Director of Ecology on March 29, 2000. RL is appealing certain aspects of the Ecology requirements, with formalized hearings scheduled for early in calendar year 2001. As a result of RL's July 31, 2000 submittal of the LDR report, Ecology responded with an August 4, 2000 letter that said the report fails to meet requirements of the Final Determination. Because RL did not intend to meet all of the requirements, due to cost, legal requirements, and other factors, receipt of this letter was not a surprise. Contractor personnel met with RL on August 11, 2000 and decided to send a letter to Ecology stating that RL is ready and willing to work with Ecology on the areas of disagreement. The contractor continues to support RL in resolving this issue.

Ecology continues to delay issuance of Modification E of the Hanford Facility RCRA Permit. Ecology has stated that the permit will not be issued in July, and probably not in August. Modification E will incorporate the CWC and the 616 Non-radioactive Dangerous Waste Storage Facility (NRDWSF) Closure Plan into the RCRA Permit.

BASELINE CHANGE REQUESTS CURRENTLY IN PROCESS (\$000)

PROJECT CHANGE NUMBER	DATE ORIGIN	BCR TITLE	FY00 COST IMPACT \$000	SCH.	TECH.	DATE TO CCB	CCB APP'D/D	RL APP'D/D	CURRENT STATUS
WM-2000-003R1	7/13/00	T-Plant Canyon Deck Clean off and PWR Fuel Removal	\$ 3,534			07/25/00	08/02/00	06/01/00	At DOE-RL
WM-2000-005R1	7/17/00	WMP FY 2000 Repricing Impacts	\$ 1,095			07/25/00	08/02/00		At DOE-RL
WM-2000-006	3/21/00	TRU Project Rebaselining	\$ -			06/08/00	06/08/00		At DOE-RL
WM-2000-015	7/26/00	WMP FY 2001 MYWP Revision	\$ -						At CCB
ADVANCE WORK AUTHORIZATIONS									
		None at this time							

MILESTONE ACHIEVEMENT

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MILESTONE TYPE	FISCAL YEAR-TO-DATE				REMAINING SCHEDULED			TOTAL FY 2000
	Completed Early	Completed On Schedule	Completed Late	Overdue	Forecast Early	Forecast On Schedule	Forecast Late	
Enforceable Agreement	2	0	0	0	0	0	0	2
DOE-HQ	0	0	0	0	0	0	0	0
RL	0	0	0	0	0	8	0	8
Total Project	2	0	0	0	0	8	0	10

Tri-Party Agreement / EA Milestones

Number	Milestone Title	Status
M-91-03 (WMH-00-001)	Issue TRU/TRUM Waste PMP	due 06/30/00 — Completed 6/29/2000 (stretch)
M-91-04 (A2J-00-001)	Complete Construction of CH TRU/TRUM Retrieval Facility	due 09/29/00 — DOE-RL issued a letter to Ecology on February 29, 2000 documenting closure of the TPA milestone as retrieval has been initiated and is planned to continue, even without construction of Project W-113 facilities.

DNFSB Commitments

	Nothing to report.	
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MILESTONE EXCEPTION REPORT

<u>Number/WBS</u>	<u>Level</u>	<u>Baseline Milestone Title</u>	<u>Forecast Date</u>

OVERDUE – 0

FORECAST LATE – 0

FY 1999 OVERDUE – 1

TRP-98-709 RL Complete Hot Cell Deactivation 03/31/99 09/30/00
1.4.2 WESF Facility (A-E)

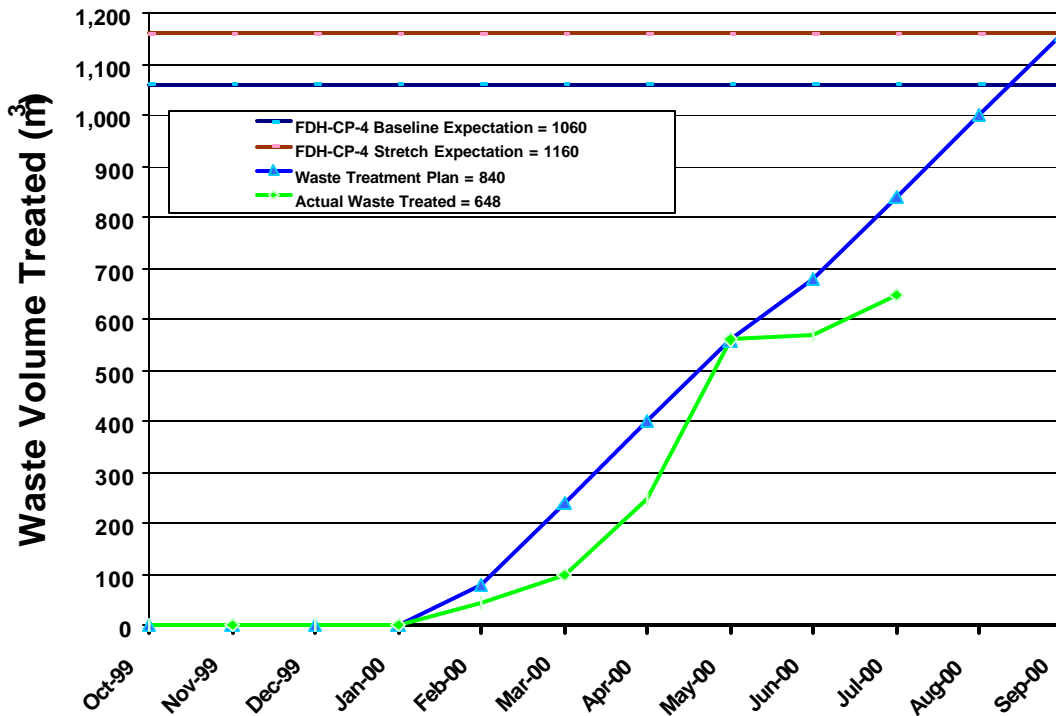
Cause: This milestone is not complete due to not being supported at the current funding level.

Impact: No overall impact is expected.

Corrective Action: Return-on-Investment (ROI) funding has been identified for this work scope and a new forecasted completion date of September 30, 2000 established.

PERFORMANCE OBJECTIVES MLLW TREATMENT

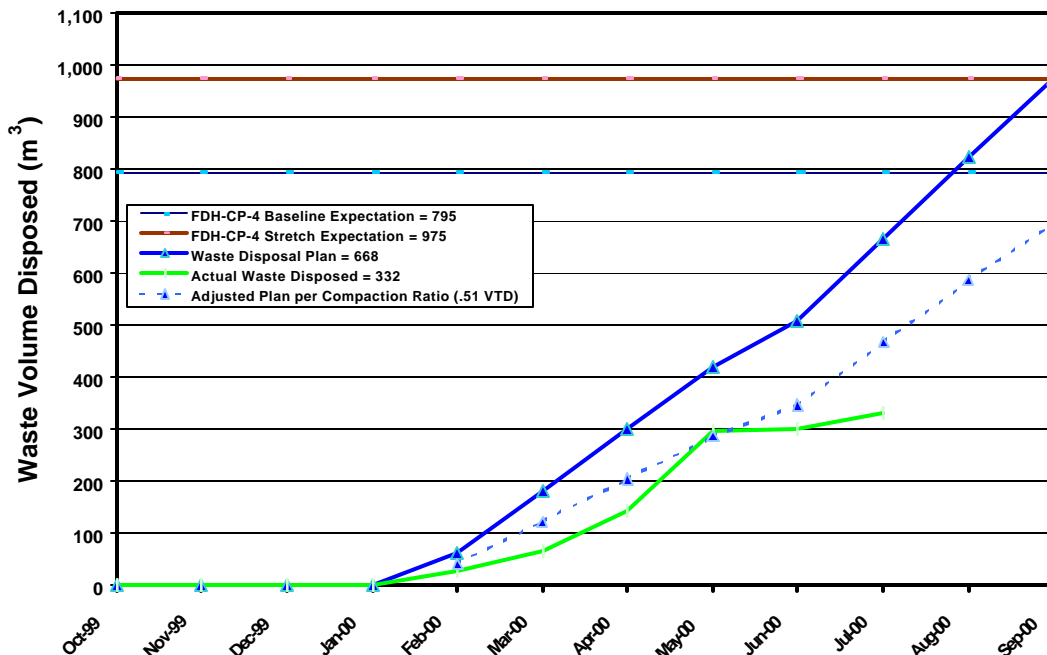
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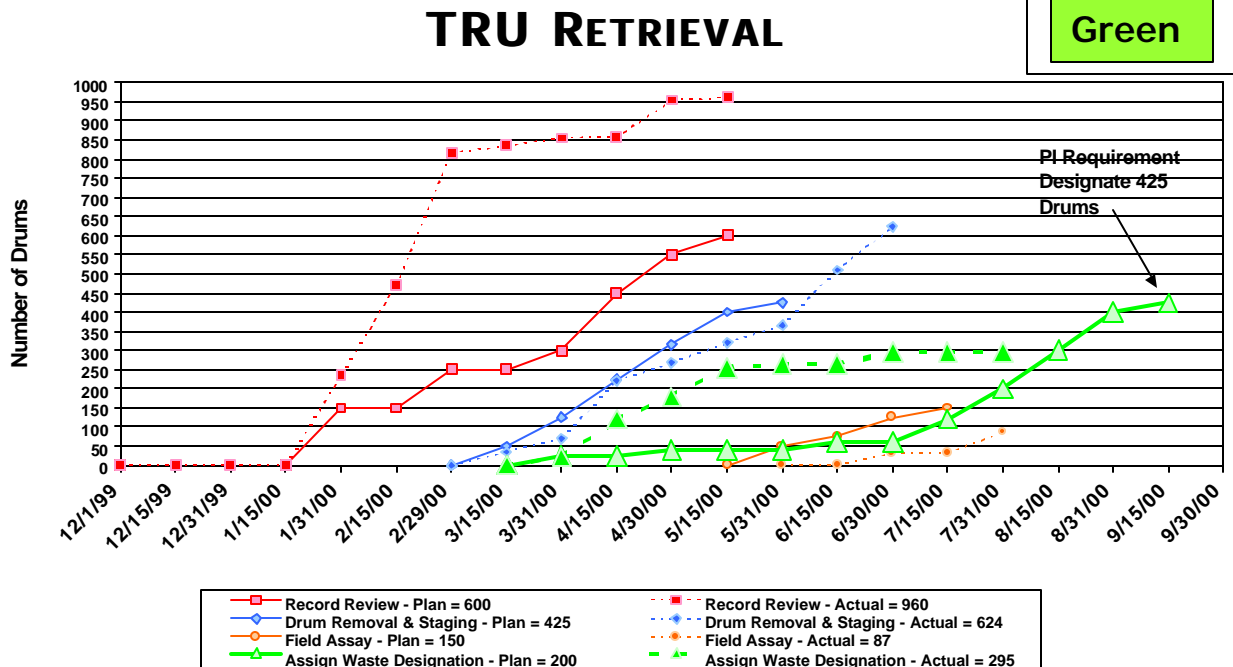
Action Plans: Minimum requirement of 560m³ treated completed in June 2000. Behind schedule to treat the remaining 500m³ due to paperwork issues; recovery expected in August 2000.

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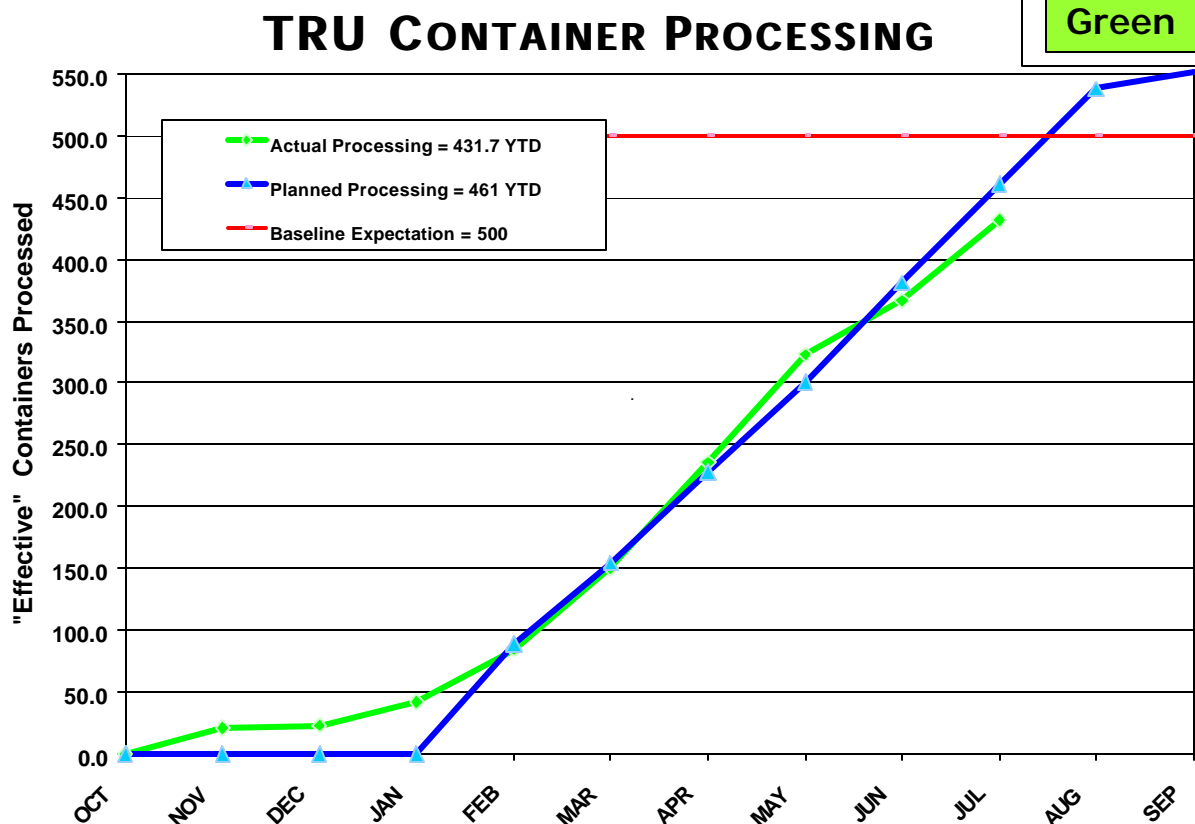
MLLW DISPOSAL



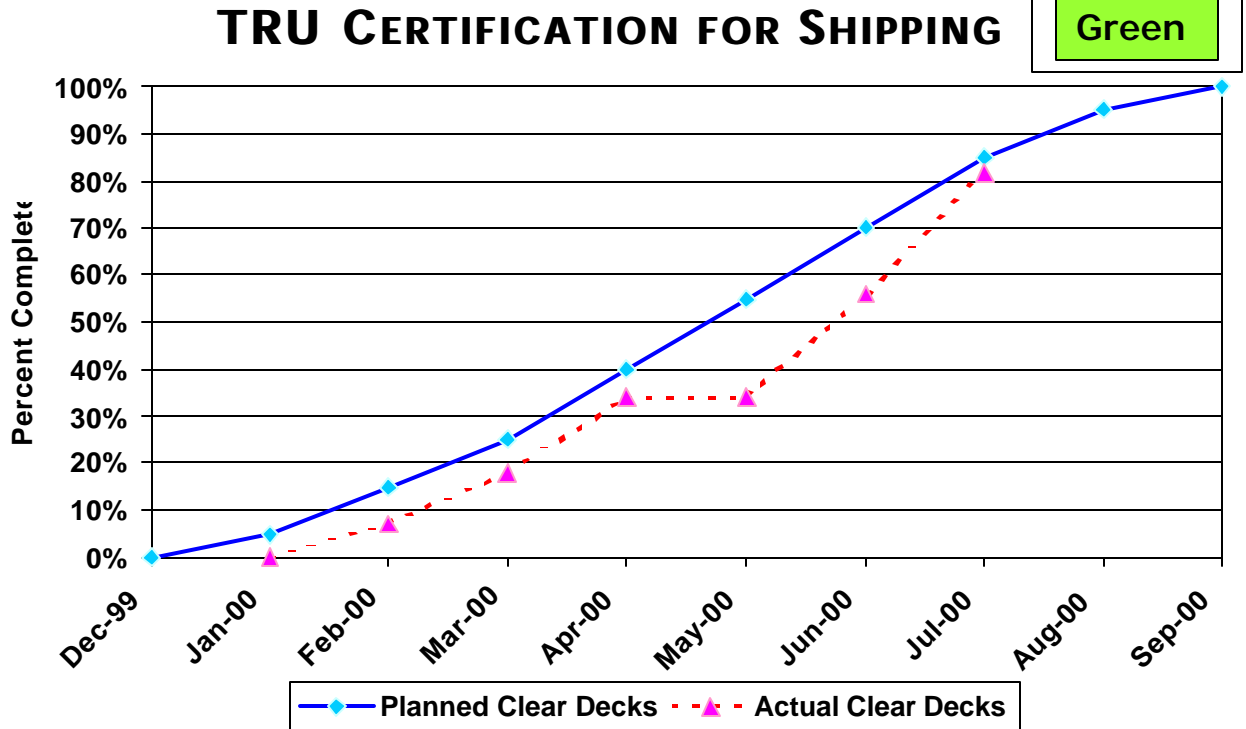
Action Plans: Behind due to treatment slippage. Recovery expected in August 2000.



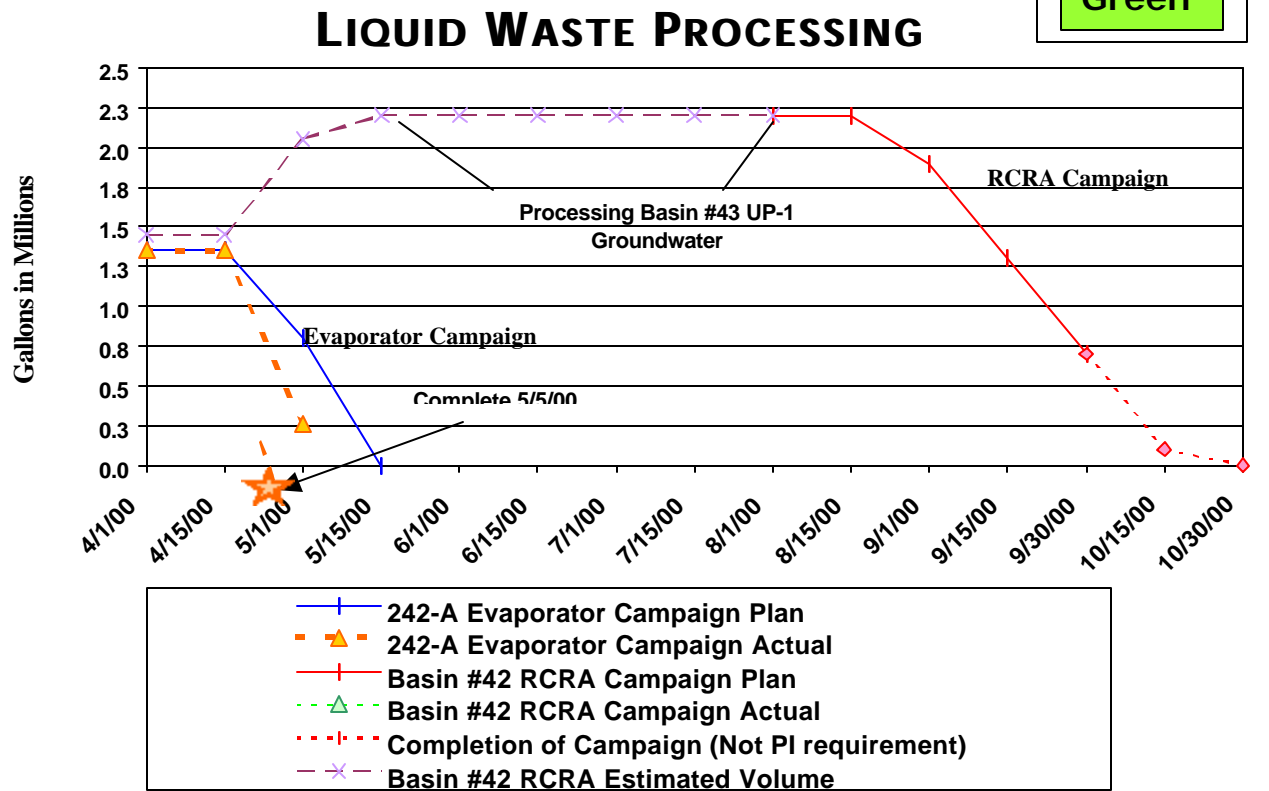
Action Plans: On track to meet new stretch goal of 425 drums with 295 drums designated through July 31, 2000. Retrieval and designation of 425 suspect TRU drums was achieved with the completion of field assaying on August 3, 2000. The validation of the assay data is in progress (due the week of September 9, 2000) which will complete the PI expectation.



Action Plans: On track.



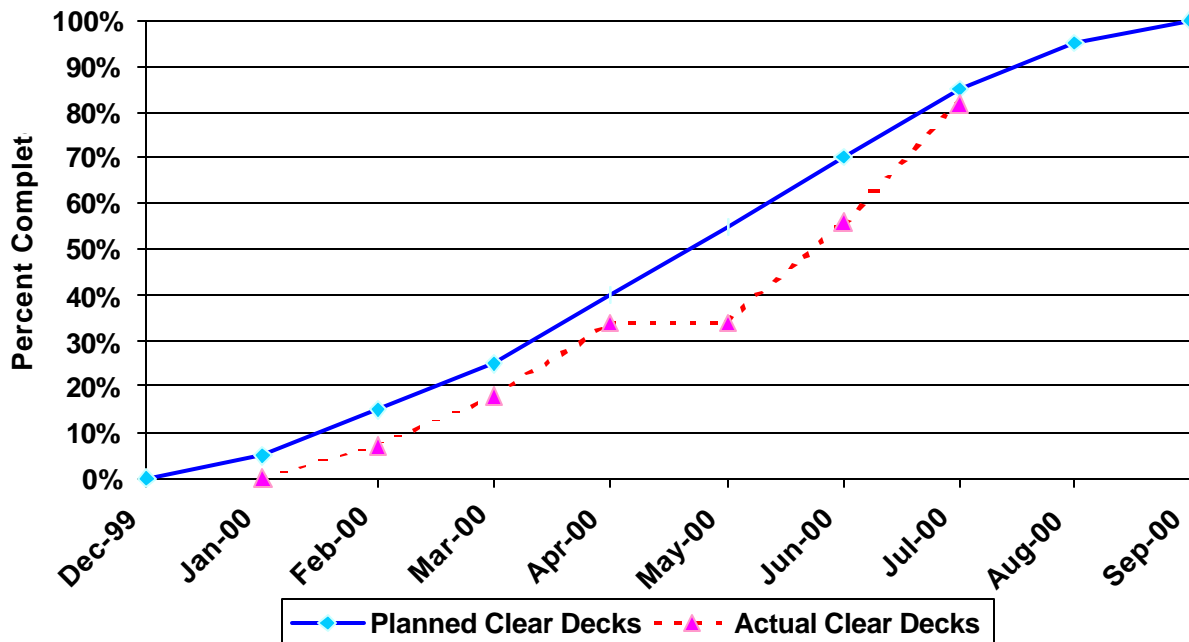
Action Plans: PI renegotiation in progress and in the signature stage. First shipment to WIPP completed in July.



Action Plans: On track. The RCRA campaign was initiated on August 19, 2000.

T Plant Deck Clearing (RC-4-1-1)

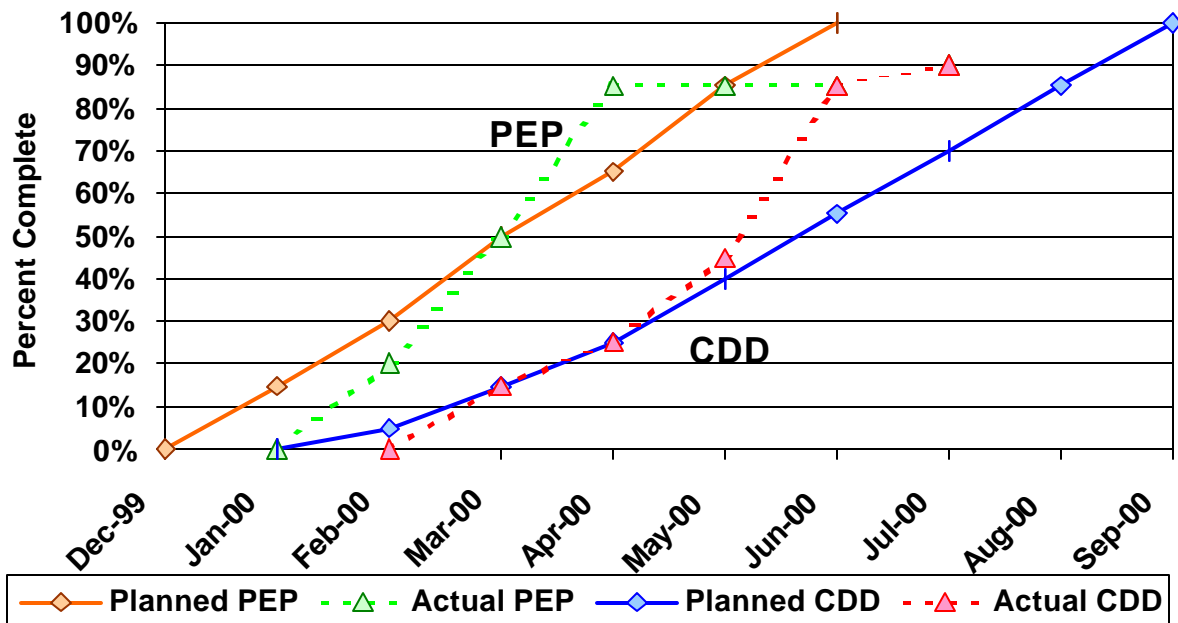
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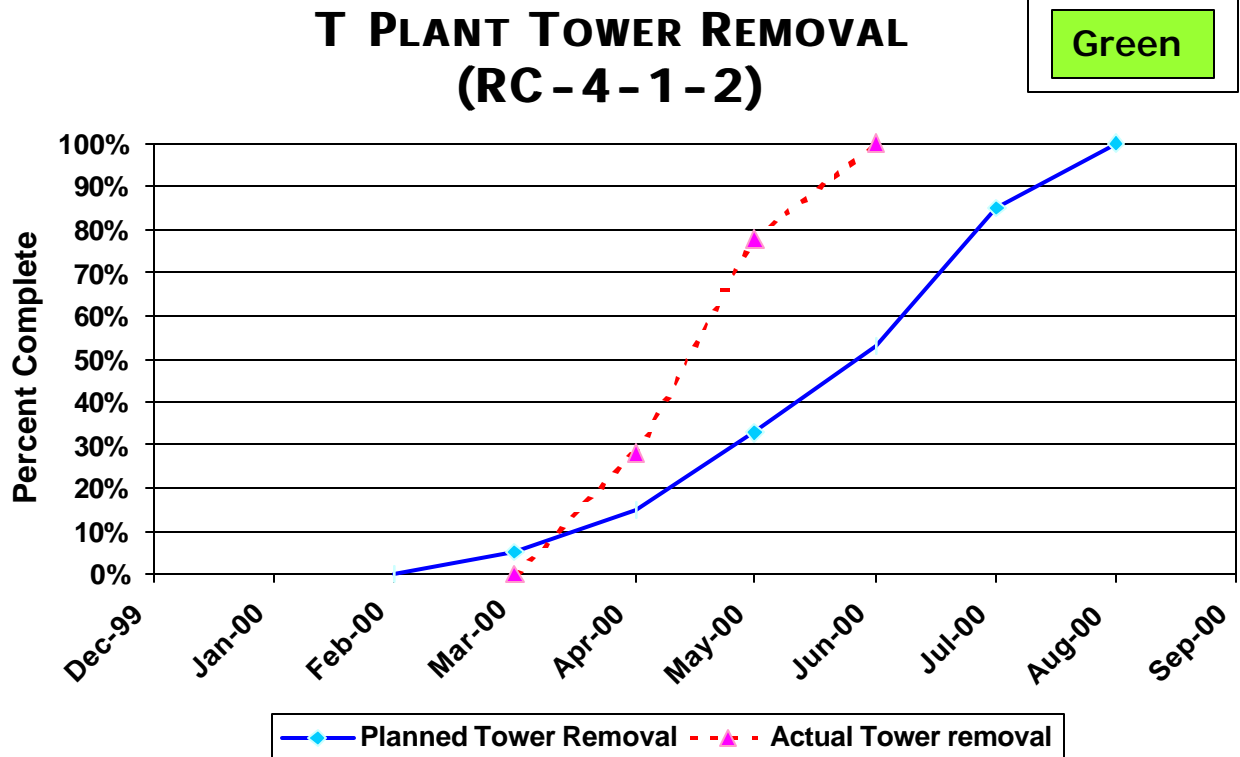
Action Plans: On track. Ramping up for completion in September 2000.

Green

T PLANT PEP AND CDD



Action Plans: On track. The Project Execution Plan (PEP) and the Conceptual Design Document (CDD) are both 85 percent complete, and will be completed in September 2000. PEP completion delayed due to required CDD input.



Action Plans: Complete. Two towers removed and disposed of in the low level burial grounds (LLBG).

KEY INTEGRATION ACTIVITIES

- Preparing T Plant to receive Spent Nuclear Fuel K Basin sludge.
- Issuance of Records of Decision for Low-Level Waste (LLW) and Mixed Low-Level Waste (MLLW) is expected to affect Hanford's role in disposing of waste from other sites. Working with DOE-RL, DOE-HQ and other Sites to develop and define Hanford's role as one of the identified LLW/MLLW disposal sites for the Complex.
- Support continued UP-1 Groundwater treatment.
- Support River Corridor Project in cleanup and removal of waste from 324 and 327 buildings.
- Continue working with PNNL, EM 50 and Mixed Waste Focus Area (MWFA) to obtain funding in support of mixed waste processing (M-91 Facility Project).
- Continue to work with DOE- RL, -Oakland, and -Ohio to support resolution of TRU small quantity site disposition issues.